

IN THE SPECIFICATION:

PAGE 1:

~~/~~ Line 7, change "with" to --in--;

PAGE 17:

~~/~~ Line 22, change "above" to --under--;

PAGE 19:

~~/~~ Line 2, change "above" to --under--;

PAGE 26:

~~/~~ Line 7, change "25a, 25c and 25e" to
--28a, 29c and 28e,--;

~~/~~ Line 9, change "25f, 25b, 25d and 25g," to
--28f, 28b, 28d, 28g,--;

~~/~~ Line 14, change "25a, 25a," to --28a, 28a,--;

~~/~~ Line 15, change "25c, 25c," to --28c, 28c-- and
change "25e, 25e" to --28e, 28e--;

~~/~~ Line 17, change "25f," to --28f,-- and change
"25b," to --28b,--;

~~/~~ Line 18, change "25b," to --28b,--, change
"25d, 25d," to --28d, 28d,-- and change
"25g," to --28g,--;

PAGE 27:

~~/~~ Line 20, change "bottom" to --upper--;

PAGE 28:

~~/~~ Line 11, change "bottom" to --upper--;

PAGE 43:

Line 12, change "piezoelectric element 47" to
--vibrator 49--;

PAGE 68:

Line 9, change "th" to --the--.

IN THE CLAIMS:

Amend claims 1-13 by rewriting them in amended form
as follows:

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a

1. (Amended) A piezoelectric actuator comprising: a plurality of stacked piezoelectric elements for undergoing expansion/contraction movement in accordance with a driving signal applied thereto, at least one of the piezoelectric elements having a thickness different than at least one of the other piezoelectric elements [having different thicknesses stacked on one another].

2. (Amended) A piezoelectric actuator according to claim 1; further comprising driving means for inputting [Claim 1 which is distorted when] a driving signal to the piezoelectric elements [is input] to generate a driving force for expanding/contracting the piezoelectric elements; wherein the plurality of piezoelectric elements comprise a first group of piezoelectric elements disposed at a first side of the

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piezoelectric actuator and a second group of piezoelectric elements disposed at a second side of the piezoelectric actuator which undergoes less expansion/contraction movement than the first side, one of the [and in which a] piezoelectric elements in the first group having a [element located at a side of the piezoelectric actuator with greater distortion has a] thickness smaller than that of a piezoelectric element in the second group [located at a side of the piezoelectric actuator with smaller distortion].

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3. (Amended) A piezoelectric actuator according to claim 1; further comprising driving means for inputting a driving signal to the piezoelectric elements to generate a driving force for expanding/contracting the piezoelectric elements to vibrationally drive the piezoelectric elements; [Claim 1,] wherein at least two of the piezoelectric elements generate vibrations in the same direction.

4. (Amended) A piezoelectric actuator according to claim 1; further comprising an output section for undergoing movement in response to expansion/contraction movement of the piezoelectric elements; [Claim 1,] wherein the piezoelectric elements are stacked in a direction [in] parallel to the output section [with an output portion of the piezoelectric actuator].

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(cont.)

5. (Amended) A piezoelectric actuator according to claim 1; further comprising an output section for undergoing movement in response to expansion/contraction movement of the piezoelectric elements; [Claim 1,] wherein the piezoelectric elements are stacked in a direction perpendicular to the output section [portion of the piezoelectric actuator].

6. (Amended) A piezoelectric actuator according to claim 1; further comprising driving means for inputting a driving signal to the piezoelectric elements for expanding/contracting [Claim 1, wherein] the piezoelectric elements [are piezoelectric elements for generating] to generate a plurality of different vibrational waves; wherein vibrations which are synthesized to be used as] a driving force is generated by a combination of the different vibrational waves.

7. (Amended) A piezoelectric actuator according to claim 6; [Claim 6,] wherein the plurality of different vibrational waves [vibrations of the piezoelectric elements] are each generated by a respective one of the [separate] piezoelectric elements.

8. (Amended) A piezoelectric actuator according to claim 1; wherein one of [Claim 1, wherein] the piezoelectric elements comprises [include] a piezoelectric element for

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detecting a vibration and having [wherein the piezoelectric element for detecting a vibration has] a thickness different from that [those] of the other piezoelectric elements.

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9. An ultrasonic motor comprising: a piezoelectric actuator having a plurality of stacked [formed by stacking] piezoelectric elements for undergoing vibrational movement in accordance with a driving signal applied thereto, at least one of the piezoelectric elements having a thickness different than at least one of the other piezoelectric elements [having different thicknesses]; and a vibrator connected to the piezoelectric actuator and having a [the same] thickness equal to [as] that of the piezoelectric actuator for undergoing vibration in accordance with vibrational movement [vibrated by a vibration] of the piezoelectric actuator.

ad

10. (Amended) A piezoelectric sensor comprising: a piezoelectric actuator having a plurality of stacked piezoelectric elements for undergoing vibrational movement in accordance with a driving signal applied thereto and for outputting a detecting signal in accordance with vibrational movement of the piezoelectric elements, at least one of the piezoelectric elements having a thickness different than at least one of the other piezoelectric elements [formed by stacking piezoelectric elements having different thicknesses].

*A7
cont.*

11. (Amended) A piezoelectric sensor according to claim 10; [Claim 10] further comprising driving means for inputting a driving signal to the piezoelectric elements to vibrationally drive the piezoelectric elements; wherein the plurality of piezoelectric elements comprise a first group of piezoelectric elements disposed at a first side of the piezoelectric actuator and a second group of piezoelectric elements disposed at a second side of the piezoelectric actuator which undergoes less expansion/contraction movement than the first side, one of the piezoelectric elements having [wherein the piezoelectric actuator is distorted when a driving signal is input to generate a driving force and wherein a piezoelectric element located at a side of the piezoelectric actuator with greater distortion has] a thickness smaller than that of a piezoelectric element in the second group [located at a side of the piezoelectric actuator with smaller distortion].

12. (Amended) An electronic apparatus [with a piezoelectric actuator,] comprising: a piezoelectric actuator according to claim 1; and a movable element connected to the piezoelectric actuator for undergoing movement in response to expansion/contraction movement of the piezoelectric elements [Claim 1].

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13. (Amended) An electronic apparatus [with a piezoelectric sensor,] comprising: a piezoelectric sensor according to claim 10; and a movable element connected to the piezoelectric actuator for undergoing movement in response to vibrational movement of the piezoelectric elements [Claim 10].

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Kindly add the following new claims 14-20:

14. A piezoelectric actuator comprising: a first group of stacked piezoelectric elements comprised of at least two piezoelectric elements for undergoing contraction movement in accordance with a voltage applied thereto, one of the piezoelectric elements having a thickness greater than the other piezoelectric element; and a second group of stacked piezoelectric elements comprised of at least two piezoelectric elements for undergoing expansion movement in accordance with a voltage applied thereto and stacked with the first group of piezoelectric elements, one of the piezoelectric elements of the second group having a thickness greater than the other piezoelectric element of the second group.

15. A piezoelectric actuator according to claim 14; further comprising voltage application means for applying a voltage to the first and second group of piezoelectric elements to undergo contraction movement and expansion movement, respectively; wherein the voltage application means

includes means for applying the same voltage to each of the piezoelectric elements in the first and second group so that the piezoelectric element in the first group having the greater thickness undergoes less contraction movement than the other piezoelectric element in the first group, and so that the piezoelectric element in the second group having the greater thickness undergoes less expansion movement than the other piezoelectric element in the second group.

16. An ultrasonic motor comprising: a first piezoelectric element; a second piezoelectric element integrally stacked on and having a greater thickness than the first piezoelectric element; a drive circuit for producing a drive signal for vibrationally driving the first and second piezoelectric elements; a vibrator connected the second piezoelectric element to undergo vibration in accordance with the drive signal produced by the drive circuit; and a rotor in contact with the vibrator to undergo movement in response to vibration of the vibrator.

17. An ultrasonic motor according to claim 16; wherein the vibrator has a thickness equal to the combined thickness of the first and second piezoelectric elements.

18. An ultrasonic motor according to claim 16; wherein the first and second piezoelectric elements are generally disc-shaped; and wherein the vibrator comprises a generally disc-shaped elastic element.

19. An electronic apparatus comprising: a piezoelectric actuator for undergoing vibrational movement, the piezoelectric actuator having a plurality of stacked piezoelectric elements, at least one of the piezoelectric elements having a thickness different than at least one of the other piezoelectric elements; a moving member movably disposed on the piezoelectric actuator; an output mechanism connected to be driven by the moving member; and a power transmitting mechanism for transmitting movement from the moving member to the output mechanism.

20. An electronic apparatus according to claim 19; wherein the plurality of piezoelectric elements comprises a first piezoelectric element, and a second piezoelectric element integrally stacked on and having a greater thickness than the first piezoelectric element.